

of the prescriber, unless discrimination is used in selecting the proper stage for its exhibition.

In the second or nervous stage of the disease—after all the inflammatory symptoms have subsided; and when, with a tolerably cool skin and clean tongue, the little patient is left severely distressed by the more or less copious secretion of viscid mucus from the bronchi, each attempt to get rid of which, produces the exhausting and characteristic cough; the alum, he says, will be found of great value. He has not yet met with any other remedy which has acted so satisfactorily, or given such marked and often rapid relief to the child. He generally gives it in doses of from two to six grains in children from one to ten years of age, repeated every four or six hours. For a child of two or three years, Dr. B. employs generally the following formula:—*R. Aluminis gr. xxv; extr. conii gr. xij; syrup. rhad. ʒij; aq. anethi ʒij; M. Capiat coch., 1 med., 6tâ quaque horâ.*

Dr. B. has never met with any inconvenient astringent effects on the bowels during the exhibition of this remedy; on the contrary, in more than one instance it produced, he says, diarrhœa. The only obvious effects resulting from its use were, diminished secretion of a less viscid mucus, with a marked diminution in the frequency and severity of the spasmodic paroxysms.

Dr. Bird has also administered alum in the bronchorrhœa of patients affected with emphysematous lungs, and, in severe cases, with marked advantage.

29. *Crystallized Nitrate of Silver in Diarrhœa of Children.* By Dr. HENOCHE.—According to Trousseau's proposal, nitrate of silver was employed in the polyclinic of Berlin, by Romberg, in cases of obstinate diarrhœa of children. The usual formula was: *R. argent. nitr. crystal. gr. ʒj; solve in aq. destill. q. s. mucilag. rad. salep. unc. 2½, syr. diacod. unc. ½.* A teaspoonful to be taken four times a day. The author details twelve cases of acute and chronic diarrhœa in children from nine months to twelve years of age, which were treated generally with complete success; and without any subsequent injurious consequences. Even when the symptoms indicated the presence of tuberculosis intestinalis, the nitrate of silver displayed an equally good effect. The remedy does not seem to have been used at all in the form of enema.—*Med. Times*, May 24, 1845, from *Journal für Kinder krankheiten*.

## SURGERY.

30. *Irrigations with Cold Water in the treatment of severe Traumatic Lesions.*—Dr. ROGNETTA, in his very valuable *Annales de Therapeutique Medicale et Chirurgicale et de Toxicologie*, presents a monthly sketch of the most interesting cases observed in the hospitals of Paris, and the modes of practice there adopted with a view of exhibiting the existing state of surgery in that capital. We shall frequently enrich our journal from these sketches.

In the number of his Annals for October last, Dr. Rognetta informs us that irrigations with cold water in the treatment of severe traumatic injuries are at present in high favour in the Hospitals of Paris. Four patients in the Hospital Beaujon are at this moment treated in this manner, with the greatest advantage. One is a mechanic 50 years of age, who had his right hand crushed, ground to pieces, as it were, by the wheel of a carriage; the soft parts of the last four fingers were horribly mangled, gangrenous in several points, the sheaths of the tendons largely opened, the nails torn off; some of the phalanges exposed. It was precisely one of those cases for which lately amputation would have been directed of the forearm, a practice which many surgeons still follow, and they make great boast of employing, as their only dressing, poultices, with a few leeches. But fortunately, in consequence of the continual irrigation with cold water which the surgeon has employed day and night, over the whole hand, the inflammatory reaction has been moderated and limited; it has not spread farther than the fingers, the sloughs have separated, several of the tendons are in process of exfoliation, a healthy granulating surface is established, and nature labours admirably at reparation under this constant deluge of cold water. To day, the 12th from the

accident, the patient already moves his fingers, the wrist and the forearm are neither swollen nor stiff, nor painful, and every thing promises a speedy cure, with more or less stiffness in the four fingers, the thumb not having been injured. Another patient, a man 40 years old, had his right foot drawn under a locomotive, the bones and soft parts were reduced almost to a jelly; they thought, at first, only of cutting off the leg near the ankle; however, as the first row of tarsal bones, and the corresponding part of the skin were uninjured, M. Robert performed Chopart's amputation, using for the flaps all those portions of the soft parts which were uninjured. The superior flap was large enough, but the inferior met it only imperfectly. Two simple bandages held the parts loosely together, and by the aid of cold water, the dangers attending reaction were happily surmounted; a healthy granulating surface was formed, and in spite of some small sloughs appearing on the top of the flaps, this patient is doing perfectly well, and his cure is confidently expected; to day is about the 8th since the operation. Doubtless similar results are obtained frequently without the employment of the plan of which we are now treating, but it should be noted that patients experience exceeding relief from the cold water; they forget their pain, can sleep, have scarcely any fever, or those gastric disturbances which prevent them from taking nourishment, so conducive to a prompt recovery. Wounds, indeed, are cured with great rapidity under the influence of irrigations; from the fact, too, that inflammation is either prevented or subdued by cold, those purulent deposits, (*pusées purulentes*), which are the despair of the art, and which compromise the result of the most brilliant operations, are not met with. The third patient is a man who fell upon the soles of the feet from a height of several yards. A fracture of the os calcis was the consequence, with enormous swelling of the whole foot and of the lower part of the leg, phlyctenæ and threatening gangrene. By the use of cold irrigations these accidents were successfully combated, the inflammatory process was subdued, and to-day, the 8th of the accident, the patient is doing well; the remedy is kept up constantly, and if it is suspended for a very short time the patient suffers very much. The same phenomena occurred in a fourth patient, who, in falling, dislocated the phalanx of the thumb back wards, opening the joint on the palmar side. It was easily reduced, and precautions were taken by means of irrigations, against the severe consequences which were justly apprehended. Two other patients are now undergoing the same treatment in the three wards of the Hotel-Dieu, confided for the time, to M. Denouvilliers. One is a young woman, who, in consequence of a fall, fractured the body of the lower jaw, broke the neck of the femur, and crushed the left foot, opening at the same time the tibio-tarsal joint; irrigations were employed upon the latter part, the most serious injury, certainly, which the woman sustained, and reaction was kept within proper bounds: the other patient is a man who had two of his fingers torn off; he is getting well. We have mentioned elsewhere a case of fracture of the elbow, with a wound of the joint and removal of splinters of bone, happily treated in the same manner by M. Gerdy; and another of resection of the radius treated with equal success by M. Blandin.

At the Hotel-Dieu, irrigation is effected by means of a bucket with a spigot, suspended over the top of the bed; strips of linen attached to the spigot conduct the water in several streams without any shock directly upon the wound. At Beaujon, an ordinary bucket is used, with a syphon made of a gum-elastic tube, which dips into the bucket and furnishes a regular stream of water, the stream being regulated by means of a cock in the tube itself. In both these hospitals warm or slightly tepid water is generally preferred to cold. However, the water which we saw used at Beaujon was cold, and we congratulate the surgeon thereon for as soon as the water becomes warm the true end of irrigation is more or less lost. Irrigation, in fact, acts only as a physical agent, in removing by its low temperature one of the most essential elements of inflammation—morbid heat. A vital, refrigerant, antiphlogistic action, results from it indirectly. But, if the liquid is warmed, it is evident that the morbid stimulus is but slightly lessened, and although some little good effect may be produced by the washing away of the pus and by diminishing the excess of caloric, the benefit is much less decided. M. Denouvilliers and some other surgeons think that irrigations with cold water may give rise to tetanus or gangrene; this appears to us to be a mere prejudice;

it is easy to prove that the examples adduced to sustain it are not conclusive, these accidents being entirely independent of the use of cold water. It is very much to be desired that hospital surgeons should understand better the immense advantage which the art may derive from this powerful remedial application, and that the preconceived ideas which have hitherto excluded it from several of the clinics should give place to a more perfect knowledge of its action. According to the observations of M. Robert, cold irrigations are not found to be of real utility, excepting in the severe injuries of the smaller limbs, as the hand and foot. In the forearm the advantage will be still less, and in the thigh least of all. In the last mentioned part, as M. Marjolin has observed, the water renders the skin cold and pale, but in the deeper seated tissues the inflammatory process still goes on, which seems to show that the water has a mere superficial action. We refer the reader to the 1st vol. of the *Annales de Therapeutique*, p. 76, where this question is freely discussed.

31. *Dressing of recent and old Wounds.*—This subject, Dr. ROGETTA says, (*Annales de Therapeutique*, Oct., 1844,) has lately drawn some interesting observations from M. CHASSAIGNAC. This surgeon, who, at this time performs the duties of M. Gerdy at La Charité, has applied himself to generalizing the old custom of dressing wounds but seldom, but with an important modification which it behooves us to make known. The occasional dressings were nothing more than the common dressings, applied upon charpie and other pieces of linen, and changed seldom; the pus in contact with the wound was regarded as an emollient application, (which is an error,) and the dressing, whenever it was renewed, was found to be filthy, putrefied, and sometimes full of worms. M. Chassaignac has had two objects in view in his mode of dressing, which he calls *pansement par occlusion*; to insure the escape of all the pus as fast as it is secreted, and to preserve the surface of the wound from contact with the air, and from all other sources of irritation. For this purpose he surrounds and covers the wound completely with bandages covered with ointment, which he crosses in every direction, so as to form a kind of coat of mail; these bandages which compress the wound somewhat by forcing its circumference nearer to the centre, allow the pus to escape freely through their interstices, between their edges or even through their substance, for the ointments with which they are covered melt and leave nothing but a porous tissue. Upon these bandages "*d'occlusion*" are placed some coarse charpie, compresses and an ordinary bandage. Every day the linen and the charpie are changed, and the external surface of the bandages is carefully wiped. The bandages themselves are changed, and the wound is carefully washed every four, five, six days, more or less. This, it will be seen, is not really the occasional dressing, for the wound is dressed every day, always, however, shielded by the plaster, which renders it, so to speak, a subcutaneous wound. Under this kind of dressing, wounds acquire a healthy aspect; they granulate, assume a red colour, and proceed rapidly towards cicatrization. When the dressing is changed, all the edge is found blackened and soiled by the solution of the unctuous matter, and by the generation of a sulphate of lead, the action of which may possibly contribute to the subsidence of the inflammation, and consequently to the process of cicatrization; the beautiful appearance of the wound is not entirely perceptible until it has been well cleansed. At the Hotel-Dieu, M. Denonvilliers employs this dressing in some cases, and is very well satisfied with it. We may remark that Baynton's method of dressing ulcers agrees entirely with the plan advocated by M. Chassaignac; but the method is of very general applicability, for this surgeon employs it indiscriminately in all suppurating wounds, in lacerations, in contused wounds, and obtains more success than from the ordinary dressings, the cures being more prompt, etc. M. Chassaignac thinks that the daily dressing of wounds with lint acts upon them very much like an issue pea, which is the very opposite to the opinion entertained by the ancients, who recommended the application of dry charpie when they wished to promote vigorous granulation.

However this may be, we can aver from our own experience, that the dressing by occlusion is an excellent one. Ten patients are now treated in this way at La Charité. When the wound exists with separation of parts M. Chassaignac is in the habit of making in all the parts separated a number of punctures; this conduces